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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,904	08/04/2003	YuanQiao Rao	85019LMB	7547

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EXAMINER

CHEA, THORL

ART UNIT PAPER NUMBER

1752

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/633,904

Applicant(s)

RAO ET AL

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13 and 15-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13 and 15-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 contains the language "such as ..." in "mixed function hardeners such as halogen- ..." is unclear as to whether to hardeners having function after "such as" are claimed or are exemplified. See lines 12, 15 in claim 4.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-11, 13, 15-30 are 35 U.S.C. 103(a) as being unpatentable over the combination of Christian et al (US Patent No. 6,060,230) and Beall et al (US Patent 5,552,469).

See Christian et al, the material in column 27-20 that has support an electrically conductive layer containing intercalate inside or exfoliate the smectite particle wherein the electrically-conductive layer has a dry thickness of 0.01 to 2 g/m<sup>2</sup>, and the size of particle is from 0.005 micron to 0.05 micron; the polymeric binder that are capable of sufficiently intercalating inside

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or exfoliating smectite particles including water soluble polymer including hydrophilic colloid such as gelatin in column 10, lines 24-48; the basal spacing of 50 % or more as the clay to binder weight ratio changed from 100:0 to 30:70 in column 9, lines 5-40; the support in column 12, lines 49-68; and the 8.3 weight % of clay in table in column 23-24. Christian et al fails to disclose the size of the Smectite particle having aspect ratio of 20:1 to 500:1 presented in the claimed invention, but Beall et al disclose the platelets have an aspect ratio of about 200 to 2,000 in column 6, lines 7-20. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the swellable clay within having size taught in Beall et al with an expectation of achieving a material exhibiting excellent dry and wet adhesion, and thereby provide a material and process as claimed.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christian et al (US Patent No. 6,060,230) and Beall et al (US Patent 5,552,469) in view of the Applicants' disclosure on page 11 second paragraph or Taylor et al (US Patent No. 5,800,977). The hardening agents for hydrophilic colloid has been known in the art such as disclosed in the present specification disclosure and Taylor et al. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use a hardener known in the art such as disclosed in the applicants' disclosure or Taylor et al to increase the hardening rate of hydrophilic colloid taught in Christian et al, and thereby provide an invention as claimed.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-11, 13, 15-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 9-11, 13-23 of copending Application No. 10/633,806. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention wholly encompasses the invention claimed in copending application. Both claimed inventions are related to the use of the clay having same size, same aspect ratio and hydrophilic colloid including gelatin. The hardener as claimed has commonly known in the art to increase the hardening speed of the gelatin.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. The rejection over Rao et al (US Patent No. 6,667,148) is withdrawn in view of the applicants' argument and the Declaration under 37 CFR 1.131 submitted on February 28, 2005.

#### ***Response to Arguments***

9. Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive.

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First, the rejection with respect to the rejection under 25 USC 112, second paragraph is maintained since there is no amendment to clarify the claims "such as" stated in the argument.

The argument with respect to the combination of Christian et al and Beall et al is not persuasive. Christian et al discloses a clay particle having particle size of 0.002 to 0.050 micron which is within the scope of less than or equal to 0.7 micron claimed in the present claimed invention. See column 4, lines 60-65. The aspect ratio may not be stated therein, but due to the similarity of the size thereof, the clay particle claimed in the present claimed invention and taught in Christian et al would inherently have similar size. The clay particles having aspect ratio encompassed by the scope of the claimed invention has been known in Beall et al. Beall et al discloses not only use in the automobile part or food drink container, but any other use where it is desired to alter one or more physical properties of a matrix polymer, such as elasticity and temperatures characteristic, e.g. glass transition temperature and high temperature resistant. See column 1, lines 35-39. Therefore, it would have been obvious to use the clay taught in Beall et al in the material of Christian et al to adjust the characteristic property of the electrically-conductive layer thereof, and thereby provide an invention as claimed.

The argument with respect to unexpected results is not persuasive since it is based on the Counsel's assertion. Counsel's arguments cannot take the place of evidence. In re Greenfield, 571 F. 2d 1185, 197 USPQ 227 (CCPA 1978).

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*Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *tlh*  
May 16, 2005

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752